

4.2.B. 05130204020.

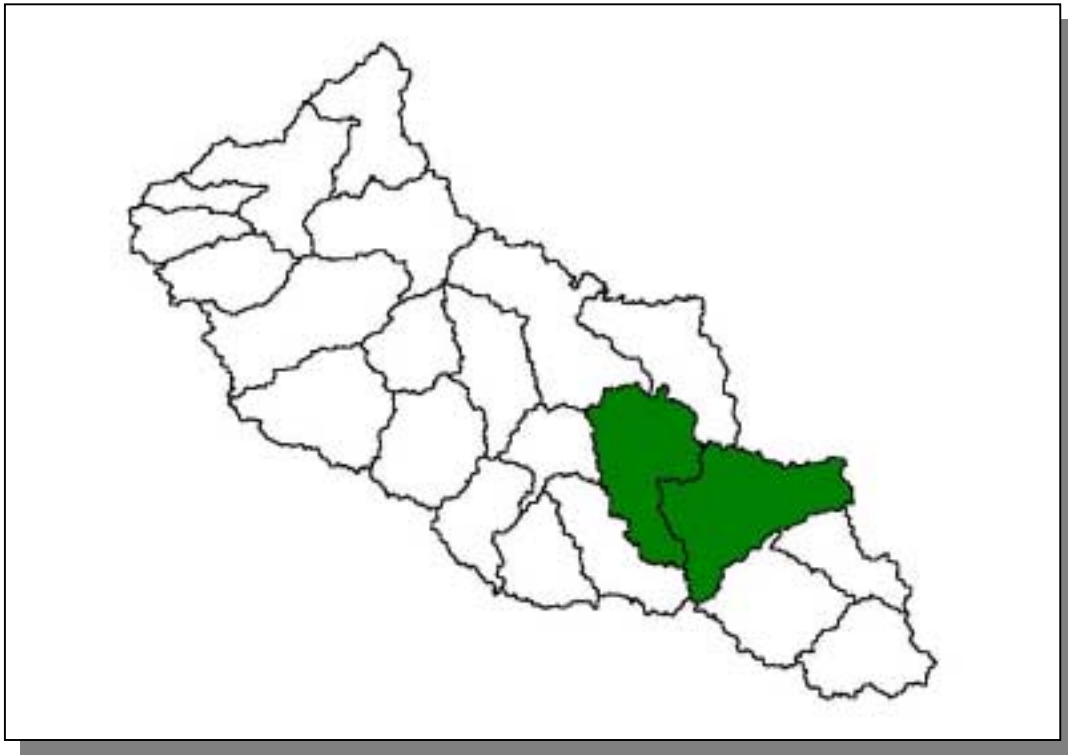


Figure 4-7. Location of Subwatershed 05130204020. All Harpeth HUC-14 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

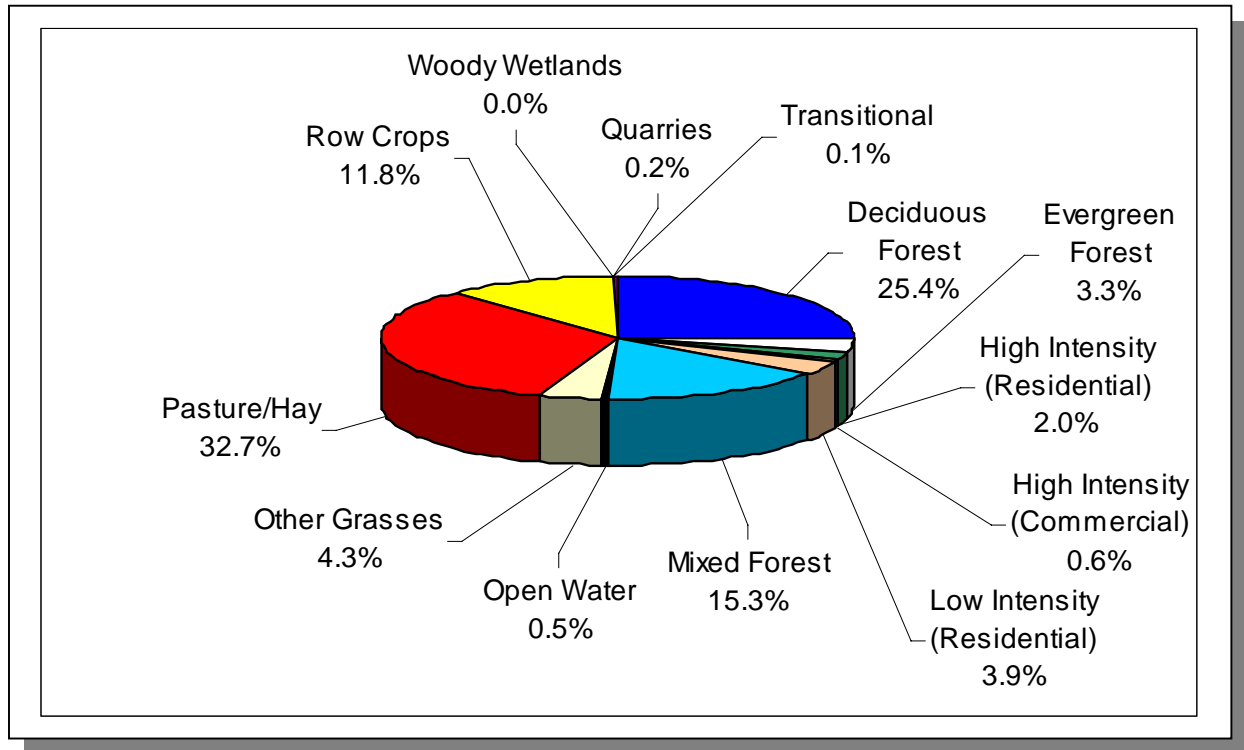


Figure 4-8. Land Use Distribution in Subwatershed 05130204020. More information is provided in Harpeth-Appendix IV.

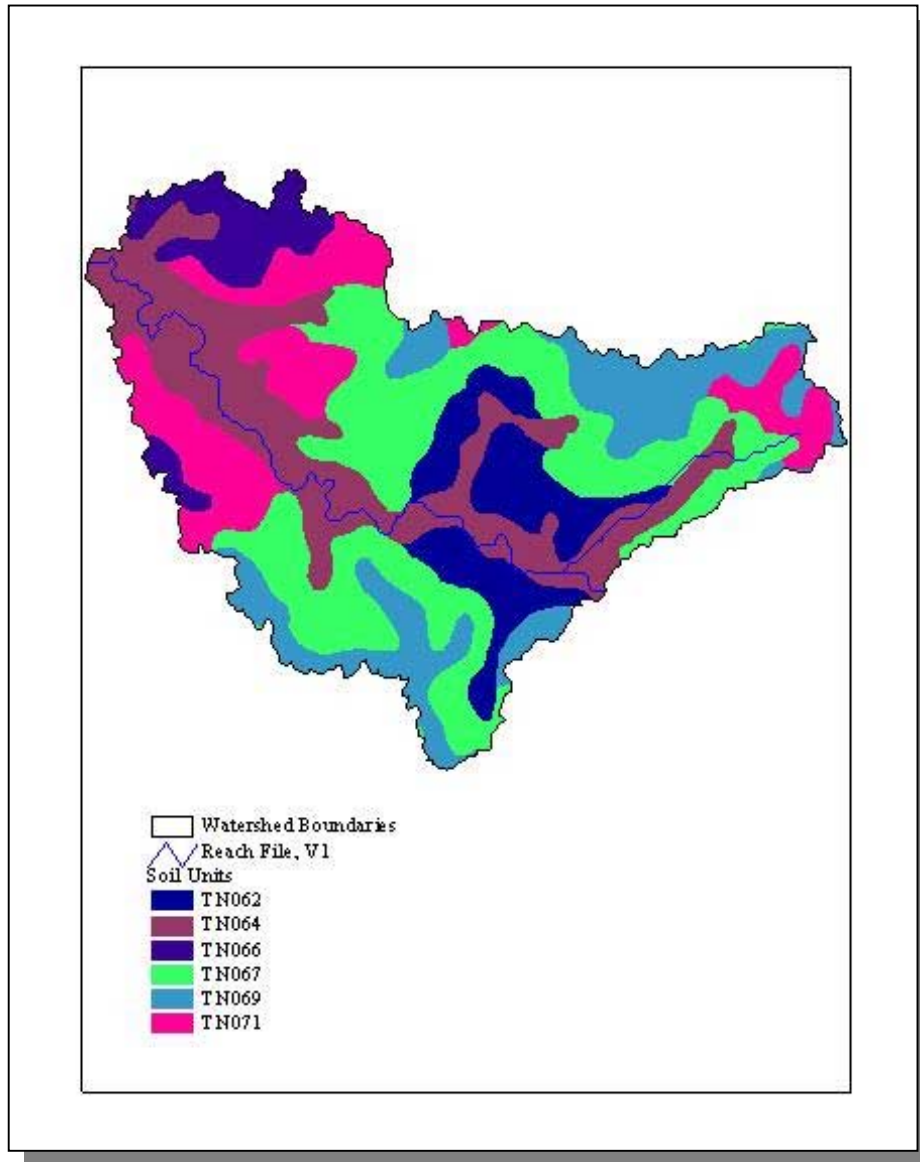


Figure 4-9. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 05130204020.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN062	0.00	C	0.98	4.40	Clayey Loam	0.26
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28
TN067	2.00	C	2.69	5.51	Silty Loam	0.35
TN069	0.00	C	2.06	5.36	Loam	0.34
TN071	0.00	C	2.37	5.70	Silty Loam	0.33

Table 4-12. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 05130204020. More information is provided in Harpeth-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
County	1990	1997 Est.	Portion of Watershed (%)	1990	1997	
Williamson	81,021	111,453	19.75	16,005	22,016	37.6

Table 4-13. Population Estimates in Subwatershed 05130204020.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Brentwood	Williamson	16,392	5,514	3,195	2,319	0
Franklin	Williamson	20,098	8,748	8,458	282	8
Totals		36,490	14,262	11,653	2,601	8

Table 4-14. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 05130204020.

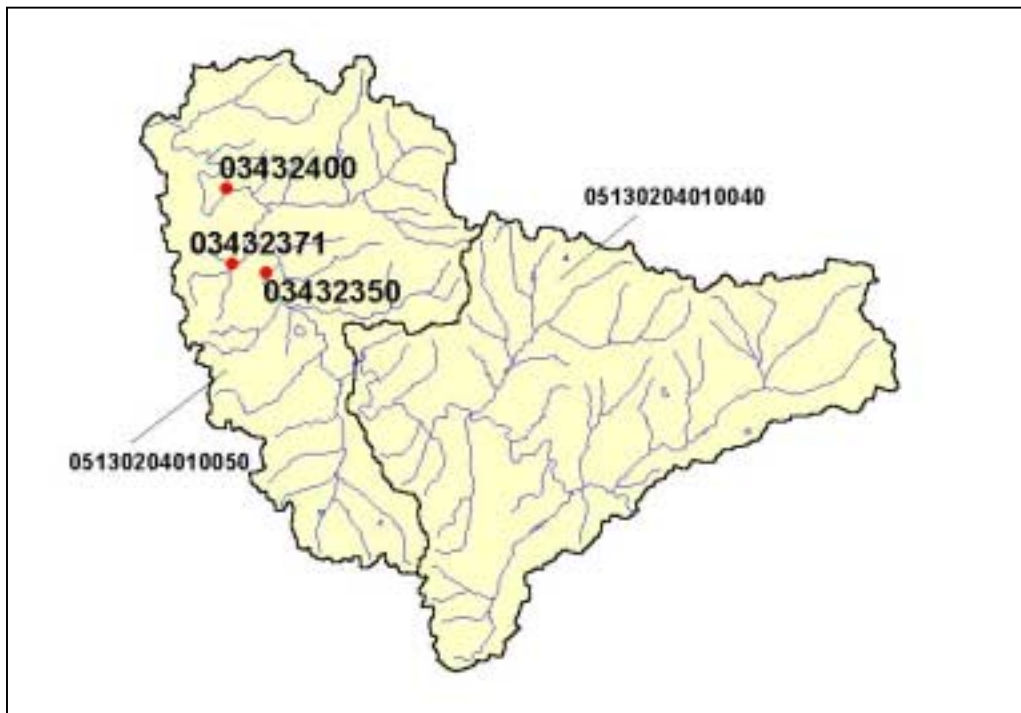


Figure 4-10. Location of Historical Streamflow Data Collection Sites in Subwatershed 05130204020. Subwatershed 05130204010040 and 05130204010050 boundaries are shown for reference. More information is provided in Harpeth-Appendix IV.



Figure 4-11. Location of STORET Monitoring Sites in Subwatershed 05130204020. Subwatershed 05130204010040 and 05130204010050 boundaries are shown for reference. More information is provided in Harpeth-Appendix IV.

4.2.B.ii. Point Source Contributions.

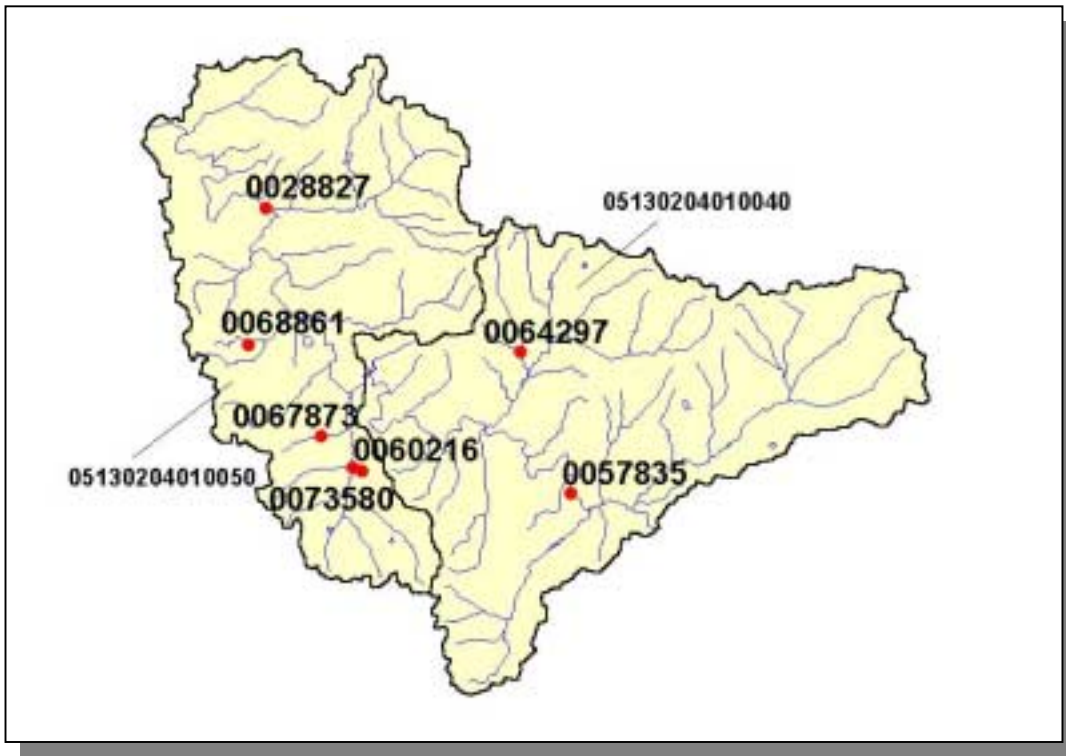


Figure 4-12. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 05130204020. Subwatershed 05130204010040, and 05130204010050 boundaries are shown for reference. More information, including the names of facilities, is provided in Harpeth-Appendix IV.



Figure 4-13. Location of Active Mining Sites in Subwatershed 05130204020. Subwatersheds 05130204010040 and 05130204010050 are shown for reference. More information, including the names of facilities, is provided in Harpeth-Appendix IV.



Figure 4-14. Location of Concentrated Animal Feeding Operation (CAFO) Sites in Subwatershed 05130204020. Subwatersheds 05130204010040 and 05130204010050 are shown for reference. More information is provided in Harpeth-Appendix IV.

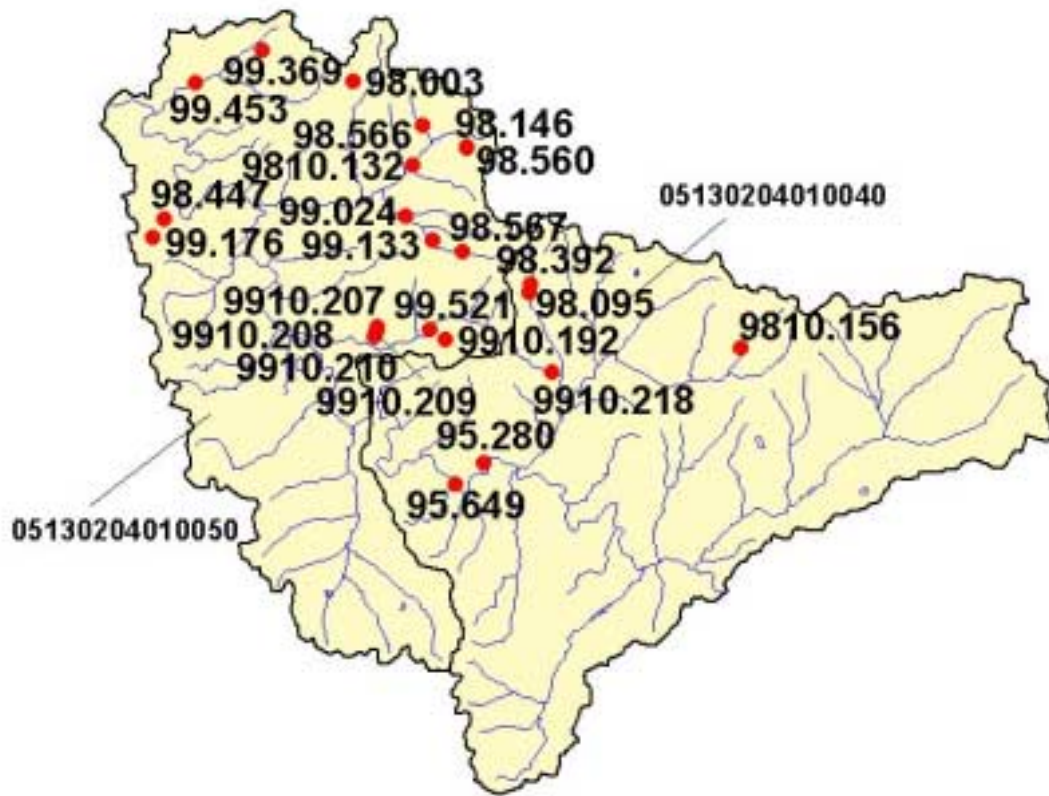


Figure 4-15. Location of ARAP Sites (Individual Permits) in Subwatershed 05130204020. Subwatershed 05130204010040 and 05130204010050 boundaries are shown for reference. More information is provided in Harpeth-Appendix IV.

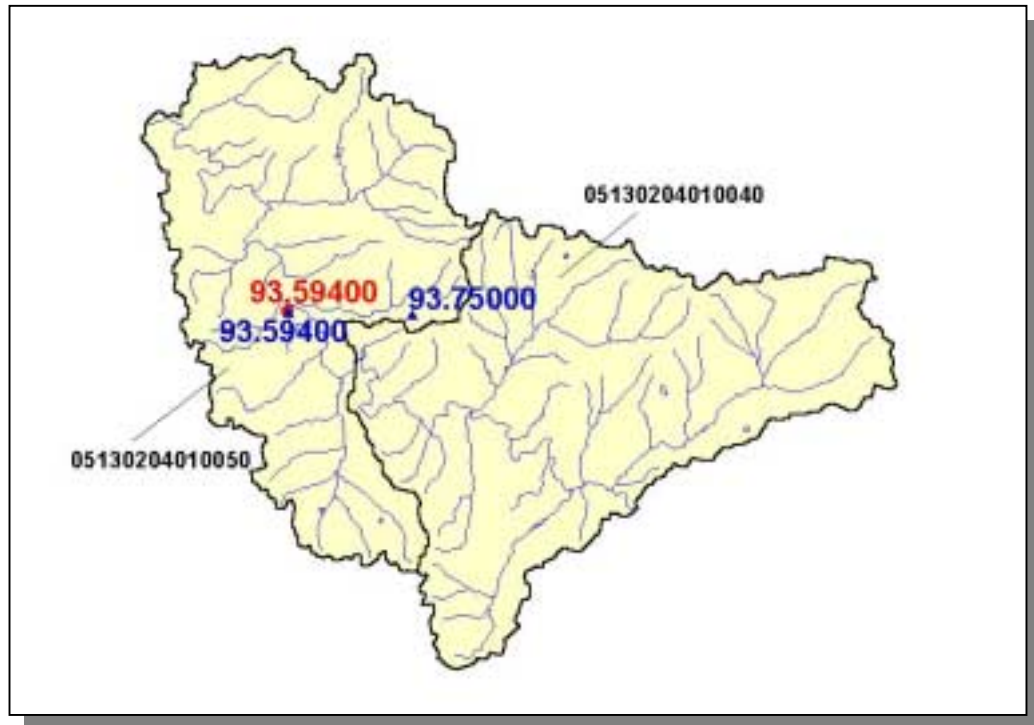


Figure 4-16. Location of Wetland Impact and Mitigation Sites in Subwatershed 05130204020. Impact (Blue Triangle) and mitigation (Red Circle) sites are from ARAP database. Subwatershed 05130204010040 and 05130204010050 boundaries are shown for reference. More information is provided in Harpeth-Appendix IV.

4.2.B.ii.a. Dischargers to Waterbodies Listed on the 1998 303(d) List.

There are four NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 05130204020:

- TN0028827 discharges to the Harpeth River @ RM 85.2
- TN0057835 discharges to the Harpeth River
- TN0060216 discharges to Fivemile Creek @ RM 5.2
- TN0067873 discharges to an Unnamed Tributary of Fivemile Creek @RM 1.1
- TN0073580 discharges to Fivemile Creek @ RM 2.2

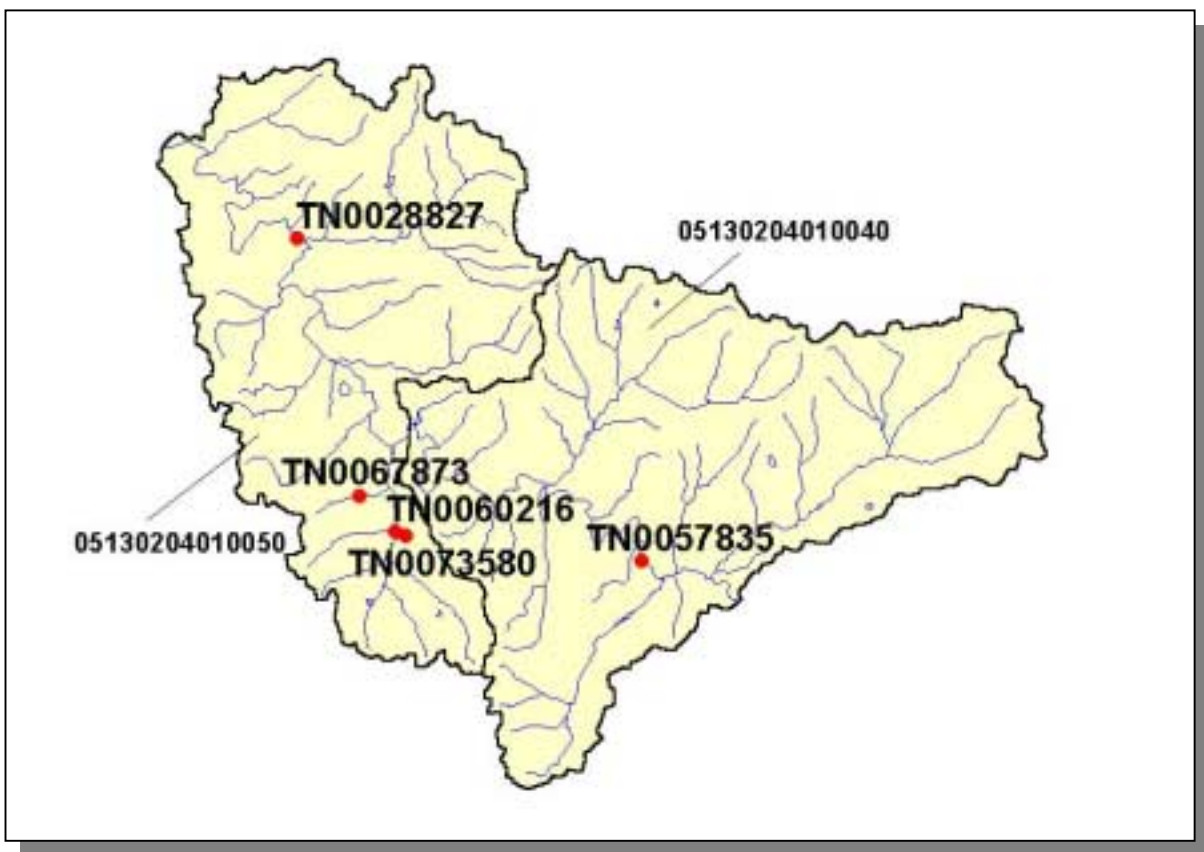


Figure 4-17. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 05130204020. Subwatershed 05130204010040 and 05130204010050 boundaries are shown for reference. The names of facilities are provided in Harpeth-Appendix IV.

PERMIT #	7Q10	1Q20	30Q2	QDESIGN	QLTA
TN0028827	0	0	0.81	5.5	4.61
TN0057835	0	0	0	0.02	
TN0060216	0	0	0	0.03	
TN0067873	0	0	0	0.01	
TN0073580	0	0	0		0.00028

Table 4-15. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 05130204020. Data are in million gallons per day (MGD). 30Q2 data were calculated using the equation method (TN0028827) or using data in *Flow Duration and Low Flows of Tennessee Streams Through 1992* (TN0057835, TN0060216, TN 0067873, and TN0073580).

PERMIT #	CBOD ₅	NH ₃	FECAL	METAL	WET	STREAM SAMPLE
TN0028827	X	X	X		X	X
TN0057835	X	X	X			
TN0060216	X	X	X		X	
TN0067873	X	X	X			
TN0073580			X	X		

Table 4-16. Monitoring Requirements for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 05130204020.

PERMIT #	BENZENE	Cd	Pb
TN0073580	Report	Report	0.1

Table 4-17. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies on the 1998 303(d) List in Subwatershed 05130204020.

4.2.B.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)					
Beef Cow	Cattle	Milk Cow	Chickens	Hogs	Sheep
5,448	10,518	457	11	600	153

Table 4-18. Summary of Livestock Count Estimates in Subwatershed 05130204020. According to the Census of Agriculture, "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Williamson	142	142	1	3.3

Table 4-19. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 05130204020.

CROPS	TONS/ACRE/YEAR
Legume Grass (Hayland)	0.14
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Farmsteads and Ranch Headquarters	0.31
Non Agricultural Land Use	0.00
Corn (Row Crops)	5.39
Soybeans (Row Crops)	3.34
Tobacco (Row Crops)	6.75
Wheat (Close Grown Cropland)	1.27
Grass (Hayland)	0.11
Legume (Hayland)	0.98
Other Cropland not Planted	6.46
Grass (Pastureland)	0.58
Grass, Forbs, Legumes (Mixed Pasture)	0.42
Other Land in Farms	0.12
Conservation Reserve Program Land	0.12
Legume (Pastureland)	0.33

Table 4-20. Annual Estimated Total Soil Loss in Subwatershed 05130204020.